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This listing presents the papers in alphabetical order of the first author, subdivided according to the groupings "Solids and Materials" and "Surfaces, Interfaces, and Layer Structures". The author index that follows covers APPLIED PHYSICS A and B, and is presented in tabular form. The names are listed in alphabetical order in the first column. The second column gives the first author of the respective paper, and the third column the bibliographic data necessary to locate the paper.The issue is specified by the number separated from the volume number by a slash. The fourth column states the major PACS number so that the topic of the paper can be inferred by consulting the PACS listing on the left page.

SOLIDS and MATERIALS

Abdul-Gader M.M., Wishah K.A., Mahmud Y.A., Abdallah M.Al-Haj, Ahmad-Bitar R.N.:
Effect of visible light intensity on the dielectric behaviour of mercuric iodide.
Appl.Phys. A 43/2, 123-130 (1987) PACS:77.40 72.40 77.30

Bauer W., Maier K., Major J., Schaefer H.-E., Seeger A., Carstanjen H.-D., Decker W., Diehl J., Stoll H.:
The positron beam at the Stuttgart pelletron accelerator and its applications to B+gamma positron lifetime measurements.
Appl.Phys. A 43/4, 261-267 (1987) PACS:78.70 07.77

Bergner H., Brückner V., Leine L., Supianek M.:
Reflectivity and transmittance investigations of photoexcited charge carriers in silicon in the picosecond time domain.
Appl.Phys. A 43/2, 97-104 (1987) PACS:72.20J 78.20

Biglari B., Samimi M., Hage-Ali M., Siffert P.:
Passivation of high-resistivity cadmium telluride by hydrogen implantation.
Appl.Phys. A 43/1, 47-52 (1987) PACS:72.20

Böhm M., Scharmann A.:
The pre-exponential factor of the escape probability in thermally stimulated processes.
Appl.Phys. A 43/1, 29-35 (1987) PACS:71.00 70.20 78.00

Charlton M., Jacobsen F.M.:
Applications of accelerator-based low-energy positron beams in atomic physics.
Appl.Phys. A 43/4, 235-245 (1987) PACS:78.70 34.90 36.10

Dannefear S., Mascher P., Kerr D.:
Comment on "Amorphous hydrogenated silicon studied by positron lifetime spectroscopy".
Appl.Phys. A 43/2, 91-92 (1987) PACS:71.60 72.80 78.70

Dehe G., Griesbach P., Gütlich P., Suwalski J.:
57Fe, 61Ni, and 121Sb Mössbauer study of oxidic spinel ferrities Co(x)Ni(5/3-x)FeSb(1/3)O(4).
Appl.Phys. A 43/3, 213-218 (1987) PACS:75.30 76.00

Dorikens M., Dorikens-Vanpraet L., Segers D., Lemalhieu T.:
Generation of slow positrons on an electron LINAC.
Appl.Phys. A 43/4, 257-259 (1987) PACS:07.77 29.25 78.70

El-Kabbany F., Badr Y., Said G., Taha S.:
Ferroelectricity associated with the metastable phase "III" of AgNO3.
Appl.Phys. A 43/1, 65-70 (1987) PACS:64.00 77.00 85.50

Germanova K., Hardalov Ch.:
EL2 deep level in sub-bandgap surface photovoltage spectra in GaAs bulk crystals.
Appl.Phys. A 43/2, 117-121 (1987) PACS:61.70 73.40

Halbritter J.:
On the oxidation and on the superconductivity of niobium.
Appl.Phys. A 43/1, 1-28 (1987) PACS:73.00 74.00 79.00 81.00

Heinz P., Kriegleder W., Laubereau A.:
Feedback control of an actively-passively mode-locked Nd:glass laser.
Appl.Phys. A 43/3, 209-212 (1987) PACS:42.60B 42.60

Howell R.H., Rosenberg I.J., Fluss M.J.:
Production and use of low-energy, monoenergetic positron beams from electron LINACS.
Appl.Phys. A 43/4, 247-255 (1987) PACS:78.70B 07.77

Jahn L.A.G., Kasinski J.J., Miller R.J.D.:
High-energy handling capabilities of optical fibers: Application to pulse compression and direct generation of megawatt picosecond pulses.
Appl.Phys. A 43/1, 41-46 (1987) PACS:42.80M

Kuphal E.:
The influence of graphite boat material on the purity of LPE InGaAs.
Appl.Phys. A 43/1, 37-40 (1987) PACS:81.10 85.30

Kurosu T., Yasuda H., Akiba Y., Iida M., Choe I.Y.:
Transient negative photoconductivity in silicon doped with gold.
Appl.Phys. A 43/3, 205-208 (1987) PACS:72.40 72.20 85.30

Langer J.J., Uler E., Golankiewicz K.:
Toward molecular electronics. An intramolecular p-n junction.
Appl.Phys. A 43/2, 139-141 (1987) PACS:85.40 72.20 76.00

Mertens Ph., Bogen P.:
Densities and velocity distributions of atomic hydrogen and carbon, measured by laser-induced fluorescence with frequency tripling into the vacuum UV.
Appl.Phys. A 43/3, 197-204 (1987) PACS:42.65C 32.50 79.20 52.80

Mey G.de, Verhenne G., Oost K.van, Landuyt J.:
Conductivity fluctuations in planar resistors.
Appl.Phys. A 43/2, 93-95 (1987) PACS:72.20 73.60 41.00

Pearton S.J., Corbett J.W., Shi T.S.:
Hydrogen in crystalline semiconductors.
Appl.Phys. A 43/3, 153-195 (1987) PACS:71.55F 72.80

Poth H.:
Antihydrogen formation through positron-antiproton radiative combination.
Appl.Phys. A 43/4, 287-293 (1987) PACS:07.77 78.70

Rich A., House J.van, Gidley D.W., Conti R.S., Zitzewitz P.W.:
Spin-polarized low-energy positron beams and their applications.
Appl.Phys. A 43/4, 275-281 (1987) PACS:34.90 36.10 75.30

Schaefer H.E., Würschum R., Schwarz R., Slobodin D., Wagner S.:
Reply to the comment by S.Dannefaer, P.Mascher, and D.Kerr on the paper of H.E.Schaefer et al. on "Amorphous Si studied by positron lifetime spectroscopy" /Appl. Phys. A40, 145 (1986)/
Appl.Phys. A 43/4, 295-296 (1987) PACS:71.60 72.80 78.70

Schorn R.P., Bay H.L., Hintz E., Schweer B.:
Investigation of partial sputtering of lithium from a binary Al/Li alloy with laser induced fluorescence.
Appl.Phys. A 43/2, 147-151 (1987) PACS:79.20N 32.50 66.30

Singh S.R., Pal B.B.:
Electron ionization rate in III-V ternary semiconductors.
Appl.Phys. A 43/2, 105-109 (1987) PACS:72.15 79.20

Singh S.R., Pal B.B.:
Hot-electron drift velocity in III-V semiconductors under the condition of impact ionization.
Appl.Phys. A 43/1, 53-60 (1987) PACS:72.15 79.20

Slavov S.H.:
Equivalent resonance radius of contoured AT-cut quartz resonators.
Appl.Phys. A 43/2, 111-116 (1987) PACS:62.00

Srinivasan J., Kumar R., Gandhi K.S.:
A theory for the enhancement of photoacoustic signal by volatile liquids.
Appl.Phys. B 43/1, 35-41 (1987) PACS:78.20H 68.45 44.30 43.35

Toda K., Morita S., Takahashi K.:
Crystal-orientation dependence of photoconductivity in Pb2CrO5 thin films.
Appl.Phys. A 43/2, 131-137 (1987) PACS:72.40

Toet S.E., Lenstra D.:
A new energy model for the calculation of the surface reconstruction of III-V semiconductors: Application to the GaAs (110) surface.
Appl.Phys. A 43/2, 85-89 (1987) PACS:68.20

Wishah K.A., Mahmud Y.A., Abdul-Gader M.M., Abdallah M.Al-Haj, Ahmad-Bitar R.N.:
Temperature dependence of dielectric behaviour of illuminated HgI2
Appl.Phys. A 43/1, 61-63(1987) PACS:72.20 72.80 70.90

Zaiour A., Hage-Ali M., Koebel J.M., Bentz A., Siffert P.:
Equilibrium segregation coefficient and liquid diffusion coefficient of some impurities in tellurium.
Appl.Phys. A 43/3, 219-222 (1987) PACS:64.75

SURFACES, INTERFACES, and LAYER STRUCTURES

Al-Nasr I.A., Jabr I.J., Al-Saleh K.A., Saleh N.S.:
Measurements of Kalpha cross sections and fluorescence yields for elements in the range 42≤Z≤57 using radioisotope x-ray fluorescence.
Appl.Phys. A 43/1, 71-73 (1987) PACS:79.20

Baumgärtner H., Fuenzalida V., Eisele I.:
Ozon cleaning of the Si-SIO2 system.
Appl.Phys. A 43/3, 223-226 (1987) PACS:81.60

Isu T., Jiang D.-S., Ploog K.:
Ultrathin-layer (AlAs)m(GaAs)m superlattices with m=1,2,3 grown by molecular beam epitaxy.
Appl.Phys. A 43/1, 75-79 (1987) PACS:68.55 78.65 78.70

Kullmer R., Bäuerle D.:
Laser-induced chemical etching of silicon in chlorine atmosphere.
Appl.Phys. A 43/3, 227-232 (1987) PACS:81.60 82.65 42.60

Mondal A., Chaudhuri S., Pal A.K.:
Optical properties of ZnTe films.
Appl.Phys. A 43/1, 81-84 (1987) PACS:78.65

Rice-Evans P.C., Britton D.T., Cowan B.P.:
A vertical postiron beam for low-temperature surface studies.
Appl.Phys. A 43/4, 283-285 (1987) PACS:78.70B

Skumanich A., Dersch H., Fathallah M., Amer N.:
A contactless method for investigating the thermal properties of thin films.
Appl.Phys. A 43/4, 297-300 (1987) PACS:65.90 68.55 81.70

Slaoui A., Ponpon J.P., Siffert P.:
Characterization of thin silicon oxide obtained by lamp heating.
Appl.Phys. A 43/4, 301-304 (1987) PACS:68.55 78.30 73.40

Thuillard M., Allmen M.von:
Surface free energy of laser-produced bond percolators.
Appl.Phys. A 43/2, 143-146 (1987) PACS:81.90 64.70

Vehanen A.:
A high-intensity 58Co slow-positron beam and applications to probe near-surface disorder.
Appl.Phys. A 43/4, 269-274(1987) PACS:78.70 61.70 07.77